Winter \*\*

#### Flood Control Project Maintenance Levee Inspections

## **LMA District Cover Sheet**

**Spring 2020 Levee Inspection Results** 

# **Sacramento Maintenance Yard Sacramento Bypass**

Summer \*\*

Fall

Spring

	(March - May)	(June - August)	(September - November)	(December - February)
† Overall LMA Rating (Fall Only)				
	** Non-receipt of Summ Reports may effect o			
† SPRING INSPECTIONS: Overall maintenance deficiencies are rate	e ratings are not deterred using the same crite			lual maintenance
FALL INSPECTIONS: The overall mainten within the attached to			ation and maintenance de tended to be an indiction	
Comments				

## **Unit Cover Sheet**

**Spring 2020 Levee Inspection Results** 

## **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/7/2020 - 4/7/2020			
DWR Inspector	Zach Jojola			
Accompanied By				

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

## Levee Inspection Report By Mile - Spring 2020

# **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start		Rating **	Α	Issue No.		3		
LM End		Issue Type +	Ma	Location *	_ocation * N/A			
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Calegory				Start		End		
ltom	Item Operations & Maintenance Manuals				0		0	
пеш					0		0	
DWR ID	DWR_ST0	008_01_s _ 201	3_3					
		Comn	nent Cod	de				
Inspector Comment								
The Sacra	mento Ma	intenance Yar	d has th	e O&M mar	านลโ	S.		

No Photos

LM Start		Rating **	Α	Issue No.		4	
LM End		Issue Type +	Ma	Location *		N/A	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item		cy Supplies &			0		0
пеш	Equipmer	nt	·				0
DWR ID	DWR_ST0	008_01_f _ 201	7_4				
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
The Sacra response i		intenance Yar	d mainta	ains a stock	pile	of flood	

No Photos

LM Start		Rating **	Α	Issue No.		5		
LM End		Issue Type +	Ma	Location *		N/A		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Flood Pre	paredness &	Training		0		0	
пеш					0		0	
DWR ID	DWR_ST0	008_01_s _ 201	3_5					
		Comn	nent Coo	le				
	Inspector Comment							
	The Sacramento Yard has a written response plan and regular flood fight training.							

No Photos

\*Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable CR : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain

\*\* Rating

A : Acceptable N : Not Inspected/Rated Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

## Levee Inspection Report By Mile - Spring 2020

# **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	0.87	Rating **	A/W	Issue No.	9		
LM End	0.87	Issue Type +	Ma	Location *	WS		
Earthen Levee			GPS La	atitud	e/Longitude		
Category				Start		End	
Item	Animal Control			38.6028	71 °	38.602871 °	
item				-121.574960 °		-121.574960 °	
DWR ID	DWR_ST0	008_01_f _ 201	8_9				
		Comn	nent Cod	de			
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.							
		Inspecto	or Comm	nent			

There possibly is a beaver den on the edge of the waterside berm. It is not within the levee prism. Recommend monitoring for activity.



View of the hole on the waterside toe rode. Fall 2019.

## Levee Inspection Report By Mile - Spring 2020

## **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.05	Rating **	М	Issue No.	16			
LM End	1.05	Issue Type +	En	Location *				
Category Supplemental			GPS La	atituc	de/Longitude			
			Start		End			
Item	DWR UC	P Field Study		38.6023	36 °	38.602336 °		
пеш						-121.578281 °		
DWR ID	/R ID 19068							
	Comment Code							

#### Inspector Comment

DS\_ID:19068 FS\_ID:56647 EP\_NO: 17254

Repair Type: Non-Urgent Crossing Status: Indicator Found

FS Date: 3/23/2020 7:16:00 AM

UCIP Comments: 03/23/2020 Record upgraded to Non-Urgent due to conflicting/missing contact information of owner on warning sign. Need to follow up with owner. Only 1 of previously 2 cable signs present on the LS. Otherwise, no issues observed during inspection. Verify if Permit No. 17254 applies only to associated crossing on Unit 2. Crossing is subject to relocation within the next 1 – 2 years due to the upcoming Lower Elkhorn Basin Levee Setback (LEBLS) Project. (S. Donovan - DWR UCIP)

10/04/2012 2 cable indicators/signs found on LS. (P. Amatya - DWR UCIP)

FIELD\_STRUCT\_DESC: 6-inch high-density polyethylene (HDPE) casing containing three 1.5-inch fiber optics conduits across and bored under the left (south) bank levee of the Sacramento Bypass and under the U.S. Army Corps of Engineers slurry wall, at an unknown depth. (6-inch casing and three 1.5-inch conduits authorized under Permit No. 17254, 2000 - American Telephone and Telegraph Company [AT&T]). Permit No. 17254 authorized the removal of existing fiber optic conduits authorized under Permit No. 14673 and the relocation of three 1.5-inch conduits and their 6-inch HDPE casing from HLM 1.10 to HLM 1.12 on Levee Unit 2. (5-inch steel conduit containing fiber optic communication cable bored under the channel and both levees of the Sacramento Bypass [HLM 1.15 Unit 1 and HLM 1.10 Unit 2] at an unknown depth authorized under Permit No 14673, 1987 - American Telephone and Telegraph Company [AT&T]).

Photo 1 of 3: UCIP\_SP\_2020\_56647\_83663.jpg



Overview of the levee crown looking d/s with cable sign on the LS.

## Levee Inspection Report By Mile - Spring 2020

# **Sacramento Maintenance Yard Sacramento Bypass**

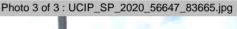
Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.05	Rating **	М	Issue No.		16 (cont)	
LM End	1.05	Issue Type +	En	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory	egory			Start		End	
ltom	DWR UC	P Field Study		38.6023	36 °	38.602336 °	
Item		-121.5782	81 °	-121.578281 °			
DWR ID	19068						



LS view: Cable sign near the levee toe.

LM Start	1.05	Rating **	М	Issue No.	16 (cont)
LM End	1.05	Issue Type +	En	Location *	





LS view: Levee slope viewed from the toe.

## Levee Inspection Report By Mile - Spring 2020

## **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.09	Rating **	М	Issue No.		17	
LM End	1.09	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory	Calegory					End	
Item	DWR UC	P Field Study		38.6021	69 °	38.602169 °	
item				-121.5790	00°	-121.579000 °	
DWR ID	19076						
	Comment Code						

#### Inspector Comment

DS\_ID:19076 FS\_ID:56574 EP\_NO: N/A

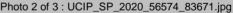
Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 03/23/2020 Record upgraded from No Action Needed to Non-Urgent due to missing permits authorizing crossing and abandonment. Crossing is subject to relocation within the next 1 – 2 years due to the upcoming Lower Elkhorn Basin Levee Setback (LEBLS) Project. (S. Donovan - DWR UCIP)10/04/2012 A concrete saddle found on slough/drainage. No pump was found on LS and no structure/pipe found on WS. P. Amatya - DWR UCIP) FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, at an unknown depth. Grouted in place. Remains of concrete structure found on the landside (LS). [Additional References: USACE Sacramento O&M Manual Unit 122 - North Levee of Sacramento Bypass - Part 1, August 1955, revised 29 December 2016 (RM 174), USACE As-Built Drawing No 50-10-2796, Sheets 2 and 3 pdf file, April 1951].

LM Start	1.09	Rating **	М	Issue No.	17 (cont)
LM End	1.09	Issue Type +	En	Location *	



Overview of the levee crown looking d/s.





Overview of the LS.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy Ob: Design & System Obsolescence
D: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Spring 2020

## **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.09	Rating **	М	Issue No.	Issue No. 17 (cont			
LM End	1.09	Issue Type +	En	Location *				
Catagony	Category				GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UC	IP Field Study		38.6021	69 °	38.602169°		
item			-121.5790	00 °	-121.579000 °			
DWR ID	19076					·		

#### Photo 3 of 3: UCIP\_SP\_2020\_56574\_83670.jpg



WS view: Looking up the levee slope.

LM Start	1.10	Rating **	М	Issue No.	18		
LM End	1.10	Issue Type +	En	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory		Start		End			
Item	DWR UCIP Field Study			38.6021	34 °	38.602134°	
пеш				-121.5791	20°	-121.579120°	
DWR ID	WR ID 19066						
Comment Code							

## Inspector Comment

DS\_ID:19066 FS\_ID:56649 EP\_NO: 13616

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 3/23/2020 2:26:00 PM

UCIP Comments: 03/23/2020 Record remains Non-Urgent due to erosion of the WS levee slope below the air vent (some cobble rock protection present). Recommend further erosion repair. Crossing is subject to relocation within the next 1 - 2 years due to the upcoming Lower Elkhorn Basin Levee Setback (LEBLS) Project. (S. Donovan -DWR UCIP)05/07/2013 After more investigation, depressions are from water run off. Erosion repair needed.10/04/2012 Horizontal air vent on waterside slope. Green vegetation and depressions found on waterside slope. More investigation required. (P. Amatya - DWR UCIP) FIELD\_STRUCT\_DESC: [Agricultural Drainage Pumping System] 1 of 2: 24-inch concrete encased steel discharge pipeline through the right bank (north) levee of the Sacramento Bypass, 6.33 feet below the crown. Siphon breaker on the waterside (WS). Vertical galvanized iron pipe trash rack on the inlet structure. (24-inch [HLM 1.31] and 20-inch pipeline authorized under Permit No. 13616, 1995 - Reclamation District No. 537 [revised]).

Photo 1 of 3: UCIP\_SP\_2020\_56649\_83675.jpg



Overview of the levee crown looking d/s.

## **Levee Inspection Report By Mile - Spring 2020**

# **Sacramento Maintenance Yard Sacramento Bypass**

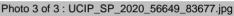
Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.10	Rating **	М	Issue No.	18 (cont)		
LM End	1.10	Issue Type +	En	Location *			
Supplemental Category				GPS Latitude/Longitude			
Calegory	ategory		Start		End		
Item	DWR UC	R UCIP Field Study		38.6021	34 °	38.602134	۰
item	item			-121.5791	20°	-121.579120	٥
DWR ID	19066						



WS view: Siphon breaker.

LM Start	1.10	Rating **	М	Issue No.	18 (cont)
LM End	1.10	Issue Type +	En	Location *	





WS view: Siphon breaker and air vent on the levee slope.

## Levee Inspection Report By Mile - Spring 2020

## **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.10	Rating **	М	Issue No. 19			
LM End	1.10	Issue Type +	En	Location *			
Category			GPS Latitude/Longitude				
Calegory			Start		End		
Item	DWR UC	P Field Study		38.6021	30 °	38.602130 °	
пеш		·			30°	-121.579130 °	
DWR ID	810			·			
	Comment Code						

#### Inspector Comment

DS\_ID:810 FS\_ID:56576 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 03/23/2020 Record upgraded to Non-Urgent. Geophysical study (07-20-2018) found no evidence of the pipe. Crossing is subject to relocation within the next 1 – 2 years due to the upcoming Lower Elkhorn Basin Levee Setback (LEBLS) Project. (S. Donovan - DWR UCIP)10/04/2012 Not Found, Installed. (P. Amatya - DWR UCIP)

FIELD\_STRUCT\_DESC: 36-inch concrete culvert through the levee, 28.0 feet below crown. A 24-inch pipe is sleeved through the culvert with the annular space grouted. A screw gate is in the concrete well on the waterward shoulder. (R.D. 537 pumping plant). [Additional

Reference: DWR Levee Log, 2004 (HLM 1.10)].

FS Date: 3/23/2020 10:27:00 AM



Overview of the levee crown at assumed location of crossing looking d/s.

## Levee Inspection Report By Mile - Spring 2020

# **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.10	Rating **	М	Issue No. 20			
LM End	1.10	Issue Type +	En	Location *			
Category			GPS Latitude/Longitude				
Calegory			Start		End		
Item	DWR UC	P Field Study		38.6021	28 °	38.602128 °	
пеш				-121.5791	50°	-121.579150 °	
DWR ID	19079			,			
	Comment Code						

#### Inspector Comment

DS\_ID:19079 FS\_ID:56577 EP\_NO: 13616

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 03/23/2020 Record remains Non-Urgent due to erosion of the WS levee slope below the air vent (some cobble rock protection present) and erosion below the riser. Recommend further erosion repair. Crossing is subject to relocation within the next 1 – 2 years due to the upcoming Lower Elkhorn Basin Levee Setback (LEBLS) Project. (S. Donovan - DWR UCIP)10/04/2012 Horizontal Air vent on waterside slope. Green vegetation and depressions also found on waterside slope. (P. Amatya - DWR UCIP)

FIELD\_STRUCT\_DESC: [Agricultural Drainage Pumping System] 2 of 2: 20-inch concrete encased steel discharge pipeline through the right bank (north) levee of the Sacramento Bypass, 6.33 feet below the crown. Siphon breaker on the waterside (WS). Vertical galvanized iron pipe trash rack on the inlet structure. (24-inch and 20-inch pipeline authorized under Permit No. 13616, 1995 - Reclamation District No. 537 [revised]).

FS Date: 3/23/2020 2:28:00 PM

LM Start	1.10	Rating **	М	Issue No.	20 (cont)
LM End	1.10	Issue Type +	En	Location *	



Overview of the levee crown looking d/s.



WS view: Siphon breaker and air vent.

DSID 19066

D910 19079

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain Enforcement

\* Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Spring 2020

# **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.10	Rating **	М	Issue No.		20 (cont)	
LM End	1.10	Issue Type +	En	Location *			
Supplemental Supplemental			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UC	P Field Study		38.6021	28 °	38.602128	0
item				-121.5791	50°	-121.579150	0
DWR ID	19079						



WS view: Siphon breaker and air vent on the levee slope.

LM Start	1.13	Rating **	М	Issue No.		21	
LM End	1.13	Issue Type +	En	Location *			
Catagory	Category				GPS Latitude/Longitud		
Calegory				Start		End	
Item	DWR UC	P Field Study		38.60199	0 °	38.601990°	
пеш				-121.57962	0°	-121.579620 °	
DWR ID	811						
Comment Code							

# Inspector Comment

DS\_ID:811 FS\_ID:56609 EP\_NO: 7616

Repair Type: Non-Urgent Crossing Status: Not Found

FS Date: 3/23/2020 9:29:00 AM

UCIP Comments: 03/23/2020 Record upgraded to Non-Urgent due to conflicting location information. Recommend contacting owner for clarification. No evidence of pipe found during inspection. Crossing is subject to relocation within the next 1 – 2 years due to the upcoming Lower Elkhorn Basin Levee Setback (LEBLS) Project. (S. Donovan - DWR UCIP)

FIELD\_STRUCT\_DESC: 1.5-inch conduit (telephone) through the levee, 2 feet below the levee crown. (Telephone conduit [HLM 1.20] authorized under Permit No. 7616, 1971 - Pacific Telephone and Telegraph Company [PT&T]). (Renewal of Permit No. 7616 authorized under Permit No. 7616-A, 1973 - PT&T). [Additional Reference: DWR Levee Log, 2004 (HLM 1.17)].

#### Photo 1 of 1: UCIP\_SP\_2020\_56609\_83702.jpg



LS view: Overview of the assumed crossing location.

## Levee Inspection Report By Mile - Spring 2020

## **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.15	Rating **	М	Issue No.		8	
LM End	1.72	Issue Type +	Ma	Location *		WS	
Category Earthen Levee			GPS La	atitud	le/Longitude		
Category				Start		End	
Item	Vegetatio	n		38.6018	75 °	38.599391 °	
item			-121.580007 °		-121.589987 °		
DWR ID	DWR_ST0	008_01_s _ 202	20_8				
		Comn	nent Cod	de			
V1 : Control annual grass and weeds on the levee slopes and easements.							
	Inspector Comment						



View of vegetation on the waterside slope. Spring 2020.

LM Start	1.19	Rating **	М	Issue No.		22
LM End	1.19	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	tituc	le/Longitude
Calegory			Start		End	
Itom	ltem DWR UCIP Field Study			38.60170	9 °	38.601709 °
ILEIII				-121.58068	0°	-121.580680 °
DWR ID	19067					

# Comment Code

#### Inspector Comment

DS\_ID:19067 FS\_ID:56650 EP\_NO: 17497

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 03/23/2020 No issues observed during inspection. Record upgraded to Non-Urgent due to missing maintenance and performance records. Recommend placing additional pipeline markes closer to the levee shoulder. Crossing is subject to relocation within the next 1 – 2 years due to the upcoming Lower Elkhorn Basin Levee Setback (LEBLS) Project. (S. Donovan - DWR UCIP)10/04/2012 Marker found on landside of the levee. (P. Amatya - DWR UCIP) FIELD\_STRUCT\_DESC: 12-inch steel jet fuel pipeline bored under the Sacramento River, Sacramento Bypass, and their levees, at an unknown depth. Markers found on the landside (LS) of the levee. (12-inch pipeline authorized under Permit No. 17497, 2003 - Wickland Pipelines LLC). (Realignment of portion of pipeline due to the Lower Elkhorn Basin Levee Setback Project is authorized under Permit No. 17497-1, 2019 - Wickland Pipelines LLC). FS Date: 3/23/2020 2:33:00 PM

#### Photo 1 of 3: UCIP\_SP\_2020\_56650\_83691.jpg



Overview of the levee crown looking d/s.

## **Levee Inspection Report By Mile - Spring 2020**

# **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.19	Rating **	М	Issue No.	22 (cont)		
LM End	1.19	Issue Type +	En	Location *			
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.6017	09 °	38.601709	٥
item				-121.5806	80°	-121.580680	0
DWR ID	19067						



WS view: Looking down the levee slope.

Photo 3 of 3: UCIP\_SP\_2020\_56650\_83693.jpg

LM Start	1.19	Rating **	М	Issue No.	22 (cont)
LM End	1.19	Issue Type +	En	Location *	





LS view: Looking down the levee slope with petroleum pipeline marker in the background.

N : Not Inspected/Rated C : Corrected A/W: Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2020

## **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.28	Rating **	М	Issue No.	23			
LM End	1.28	Issue Type +	En	Location *				
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	P Field Study		38.6012	90°	38.601290 °		
пеш			-121.5822	20 °	-121.582220 °			
DWR ID	19075							
Comment Code								

#### Inspector Comment

DS\_ID:19075 FS\_ID:56651 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 03/23/2020 Record is Non-Urgent. No permit found authorizing crossing. Geophysical study (07-20-2018) found no evidence of the pipe. This is possibly the pipe that was authorized to be replaced by three 20-inch pipes in 1960 under Permit No. 3259. The 30in pipe was supposed to be capped on both ends and completely filled by grouting. Need further investigation. Crossing is subject to relocation within the next 1 – 2 years due to the upcoming Lower Elkhorn Basin Levee Setback (LEBLS) Project. (S. Donovan - DWR UCIP) FIELD\_STRUCT\_DESC: 30-inch corrugated metal (CM) drainage pipe, invert elevation: 13.7 feet. [Additional References: USACE Sacramento O&M Manual 122 - North Levee of Sacramento Bypass - Part 1, August 1955, revised 29 December 2016 (RM 178), USACE As-Built Drawing No. 50-10-2796, Sheets 2 and 3 pdf file, April 1951, (Replacement of existing 30-inch pipe [HLM 1.30] authorized under Permit No. 3259, 1960 - Reclamation District No. 785)]. FS Date: 3/23/2020 3:20:00 PM



Overview of the levee crown at assumed location of crossing looking d/s.

## Levee Inspection Report By Mile - Spring 2020

# **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.29	Rating **	М	Issue No.	24			
LM End	1.29	Issue Type +	En	Location *				
Category				GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UC	P Field Study		38.6012	30 °	38.601230 °		
item				-121.5824	50 °	-121.582450 °		
DWR ID	19085							
Comment Code								

## Inspector Comment

DS\_ID:19085 FS\_ID:56673 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 03/23/2020 Record is Non-Urgent. No permit found authorizing crossing. No evidence of pipe found during inspection. Crossing is subject to relocation within the next 1 – 2 years due to the upcoming Lower Elkhorn Basin Levee Setback (LEBLS) Project. (S. Donovan - DWR UCIP)

FIELD\_STRUCT\_DESC: 2 of 3: 14-inch steel drainage pipe through the levee, at an unknown depth. Pump on the landside (LS). [Additional References: USACE Sacramento O&M Manual Unit 122 - North Levee of Sacramento Bypass - Part 1, August 1955, revised 29 December 2016 (RM 179), USACE As-Built Drawing No. 50-10-2796, Sheets 2 and 3 pdf file, April 1951, DWR Levee Log, 2004 (HLM 1.30)].

FS Date: 3/23/2020 8:46:00 AM



Overview of the levee crown at assumed location of crossing looking d/s.

## Levee Inspection Report By Mile - Spring 2020

# **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.29	Rating **	М	Issue No.	25		
LM End	1.29	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UC	P Field Study		38.60123	30 °	38.601230°	
item				-121.58245	50 °	-121.582450 °	
DWR ID	19074						
Comment Code							

## Inspector Comment

DS\_ID:19074 FS\_ID:56652 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 03/23/2020 Record is Non-Urgent. No permit found authorizing crossing. No evidence of pipe found during inspection. Crossing is subject to relocation within the next 1 – 2 years due to the upcoming Lower Elkhorn Basin Levee Setback (LEBLS) Project. (S. Donovan - DWR UCIP)

FIELD\_STRUCT\_DESC: 1 of 3: 14-inch steel drainage pipe through the levee, at an unknown depth. Pump on the landside (LS). [Additional References: USACE Sacramento O&M Manual Unit 122 - North Levee of Sacramento Bypass - Part 1, August 1955, revised 29 December 2016 (RM 179), USACE As-Built Drawing No. 50-10-2796, Sheets 2 and 3 pdf file, April 1951, DWR Levee Log, 2004 (HLM 1.30)]. FS Date: 3/23/2020 3:27:00 PM



Overview of the levee crown at assumed location of crossing looking d/s.

## Levee Inspection Report By Mile - Spring 2020

## **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.29	Rating **	М	Issue No.	26			
LM End	1.29	Issue Type +	En	Location *				
Category				GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UC	P Field Study		38.6012	31 °	38.601231 °		
item				-121.5824	60 °	-121.582460 °		
DWR ID	813							
Comment Code								

## Inspector Comment

DS\_ID:813 FS\_ID:56661 EP\_NO: 16279

Repair Type: Non-Urgent Crossing Status: Found

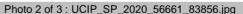
UCIP Comments: 03/23/2020 Record upgraded to Non-Urgent due to erosion of the WS levee slope around and below the riser. Some cobble rock protection present. Recommend further erosion repair. Crossing is subject to relocation within the next 1 – 2 years due to the upcoming Lower Elkhorn Basin Levee Setback (LEBLS) Project. (S. Donovan - DWR UCIP)10/04/2012 Found remains of concrete headwall and concrete box on the landside of the levee. Also found a flap gate cover on the WS berm. (P. Amatya - DWR UCIP)

FIELD\_STRUCT\_DESC: 1 of 3: 20-inch coated steel drainage pipe through the levee, 5.7 feet below the crown. Vertical pump unit on the landside (LS). Metal cutoff wall installed. Siphon breaker on the waterside (WS) shoulder. Vertical galvanized iron pipe trash rack on the inlet of the pumping plant. (20-inch pipe authorized under Permit No. 3259, 1960 - Reclamation District No. 785. 20-inch pipe [HLM 1.30] replaced under Permit No. 16279, 1994 - Reclamation District No. 785). [Additional Reference: DWR Levee Log, 2004 (HLM 1.30)]. FS Date: 3/23/2020 10:02:00 AM

LM Start	1.29	Rating **	М	Issue No.	26 (cont)
LM End	1.29	Issue Type +	En	Location *	



Overview of hte levee crown looking d/s.





LS view: Overview and pumpstation.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy Ob: Design & System Obsolescence
D: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Spring 2020

# **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.29	Rating **	М	Issue No.		26 (cont)	
LM End	1.29	Issue Type +	En	Location *			
Category				GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	DWR UC	P Field Study		38.6012	31 °	38.601231	0
item				-121.5824	60°	-121.582460	۰
DWR ID	813						



LS view: Levee slope and pump station.

LM Start	1.29	Rating **	М	Issue No.	27		
LM End	1.29	Issue Type +	En	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UC	P Field Study		38.60123	31 °	38.601231 °	
item				-121.58246	64 °	-121.582464 °	
DWR ID	19084						
Comment Code							

#### Inspector Comment

DS\_ID:19084 FS\_ID:56654 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 03/23/2020 Record is Non-Urgent. No permit found authorizing crossing. No evidence of pipe found during inspection. Crossing is subject to relocation within the next 1 – 2 years due to the upcoming Lower Elkhorn Basin Levee Setback (LEBLS) Project. (S. Donovan - DWR UCIP)

FIELD\_STRUCT\_DESC: 3 of 3: 14-inch steel drainage pipe through the levee, at an unknown depth. Pump on the landside (LS). [Additional References: USACE Sacramento O&M Manual Unit 122 - North Levee of Sacramento Bypass - Part 1, August 1955, revised 29 December 2016 (RM 179), USACE As-Built Drawing No. 50-10-2796, Sheets 2 and 3 pdf file, April 1951, DWR Levee Log, 2004 (HLM 1.30)]. FS Date: 3/23/2020 8:49:00 AM

Photo 1 of 1 : UCIP\_SP\_2020\_56654\_83701.jpg



Overview of the levee crown at assumed location of crossing looking d/s.

## Levee Inspection Report By Mile - Spring 2020

## **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.29	Rating **	М	Issue No.		28
LM End	1.29	Issue Type +	En	Location *		
Category Supplemental				GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR UC	P Field Study	,	38.6012	26 °	38.601226 °
item				-121.5824	79 °	-121.582479 °
DWR ID	19080					
Comment Code						

## Inspector Comment

DS\_ID:19080 FS\_ID:56662 EP\_NO: 16279

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 03/23/2020 Record upgraded to Non-Urgent due to erosion of the WS levee slope around and below the riser. Some cobble rock protection present. Recommend further erosion repair. Crossing is subject to relocation within the next 1 - 2 years due to the upcoming Lower Elkhorn Basin Levee Setback (LEBLS) Project. (S. Donovan -DWR UCIP)10/04/2012 Found remaining of concrete headwall and a concrete box on landside of the levee. (P. Amatya - DWR UCIP) FIELD\_STRUCT\_DESC: 2 of 3: 20-inch coated steel drainage pipe through the levee, 5.7 feet below the crown. Vertical pump unit on the landside (LS). Metal cutoff wall installed. Siphon breaker on the waterside (WS) shoulder. Vertical galvanized iron pipe trash rack on the inlet of the pumping plant. (20-inch pipe authorized under Permit No. 3259, 1960 - Reclamation District No. 785. 20-inch pipe [HLM 1.30] replaced under Permit No. 16279, 1994 - Reclamation District No. 785). [Additional Reference: DWR Levee Log, 2004 (HLM 1.30)]. FS Date: 3/23/2020 12:19:00 PM

LM Start	1.29	Rating **	М	Issue No.	28 (cont)
LM End	1.29	Issue Type +	En	Location *	



Overview of the levee crown looking d/s.





LS view: Overview and pump station.

## Levee Inspection Report By Mile - Spring 2020

## Sacramento Maintenance Yard Sacramento Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.29	Rating **	М	Issue No.		28 (cont)	
LM End	1.29	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	P Field Study		38.6012	26 °	38.601226	0
itelli			-121.5824	79 °	-121.582479	۰	
DWR ID	19080				·		



LS view: Levee slope and pump station.

LM Start	1.29	Rating **	М	Issue No.	29	
LM End	1.29	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC	P Field Study		38.60122	25 °	38.601225 °
item				-121.58249	0 °	-121.582490 °
DWR ID	19081					
Comment Code						

## Inspector Comment

DS\_ID:19081 FS\_ID:56663 EP\_NO: 16279

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 03/23/2020 Record upgraded to Non-Urgent due to erosion of the WS levee slope around and below the riser. Some cobble rock protection present. Recommend further erosion repair. Crossing is subject to relocation within the next 1 – 2 years due to the upcoming Lower Elkhorn Basin Levee Setback (LEBLS) Project. (S. Donovan -DWR UCIP)10/04/2012 Found remaining of concrete headwall and a concrete box on landside of the levee. (P. Amatya - DWR UCIP) FIELD\_STRUCT\_DESC: 3 of 3: 20-inch coated steel drainage pipe through the levee, 5.7 feet below the crown. Vertical pump unit on the landside (LS). Metal cutoff wall installed. Siphon breaker on the waterside (WS) shoulder. Vertical galvanized iron pipe trash rack on the inlet of the pumping plant. (20-inch pipe authorized under Permit No. 3259, 1960 - Reclamation District No. 785. 20-inch pipe [HLM 1.30] replaced under Permit No. 16279, 1994 - Reclamation District No. 785). [Additional Reference: DWR Levee Log, 2004 (HLM 1.30)]. FS Date: 3/23/2020 7:20:00 AM

## Photo 1 of 3: UCIP\_SP\_2020\_56663\_83728.jpg



Overview of the levee crown looking d/s.

## **Levee Inspection Report By Mile - Spring 2020**

# **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.29	Rating **	М	Issue No.		29 (cont)	
LM End	1.29	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	P Field Study		38.6012	25 °	38.601225	0
item				-121.5824	90 °	-121.582490	0
DWR ID	19081						



LS view: Overview and pump station.

LM Start	1.29	Rating **	М	Issue No.	29 (cont)
LM End	1.29	Issue Type +	En	Location *	



LS view: Levee slope and pump station.

LM Start	1.35	Rating **	М	Issue No.		10	
LM End	1.39	Issue Type +	Ма	Location *	LS		
Catagony	evee	GPS Latitude/Longitude					
Calegory	Category					End	
Item	Vegetatio	n		38.600926 °		38.600766 °	
item			-121.583562 °		-121.584222 °		
DWR ID	DWR_ST0	008_01_s _ 202	0_10				
		Comn	nent Cod	de			
V1 : Contro	ol annual g	grass and wee	ds on th	e levee slo	pes	and	
easements	easements.						
	Inspector Comment						

No Photos

## **Levee Inspection Report By Mile - Spring 2020**

# **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.36	Rating **	A/W	Issue No.		11	
LM End	1.36	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Cracking			38.6009	09 °	38.600909°	
пеш				-121.5836	24 °	-121.583624°	
DWR ID	DWR_ST0	008_01_s _ 202	0_11				
		Comn	nent Cod	de			
CR1: Mon	itor and ha	ave inspected	by geote	echnical en	gine	er.	
	Inspector Comment						
Cracking o	Cracking on the waterside shoulder. Recommend monitoring.						

No Photos

LM Start	1.43	Rating **	A/W	Issue No.		7
LM End	1.59	Issue Type +	Ma	Location *		WS
Category	Suppleme	emental GPS Latitude/Longitude		le/Longitude		
Calegory				Start		End
Item	2017 USA	CE Erosion S	Survey	38.6004	56 °	38.599713 °
item				-121.5848	33 °	-121.587668 °
DWR ID DWR_ST0008_01_f _ 2018_7						
	Comment Code					

#### Inspector Comment

2017 Site ID: SAP 1.4 R

Status: Critical

2017 Field Notes: New site, immediately upgraded to critical. Start of slump failure, deep cracks along levee crest, concern that a large slump failure will occur from the next heavy rain. Site History:

LM Start	1.43	Rating **	A/W	Issue No.	7 (cont)
LM End	1.59	Issue Type +	Ма	Location *	ws

## Photo 1 of 2: SP\_2020\_ST0008\_284\_7\_20200228\_00001.jpg



View of the waterside slope. Fall 2019.

Photo 2 of 2: SP\_2020\_ST0008\_284\_7\_20200228\_00002.jpg



View of the cracking on the crown. Fall 2018.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected M: M: Minimally Acceptable M: Acceptable

## **Levee Inspection Report By Mile - Spring 2020**

# **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento Bypass or North Levee	Right	1.74	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.74	Rating **	A/W	Issue No.		15	
LM End	1.74	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Erosion /	Bank Caving		38.5995	46 °	38.599546 °	
пеш				-121.5902	35 °	-121.590235 °	
DWR ID	DWR_ST0	008_01_s _ 201	8_15				
		Comn	nent Cod	de			
E1: Note a	and monito	or erosion site					
	Inspector Comment						
There is runoff erosion on the oversized levee section located on the waterside levee slope. Recommend monitoring.							

Photo 1 of 1: SP\_2020\_ST0008\_284\_15\_20200228\_00004.jpg

View of erosion on waterside slope. Spring 2017.

\*Location
LS: Land Side N/A: Not Applicable
WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated
M: Minimally Acceptable
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Assue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

#### **Unit Cover Sheet**

**Spring 2020 Levee Inspection Results** 

## **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/7/2020 - 4/7/2020			
DWR Inspector	Zach Jojola			
Accompanied By				

#### **Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

## Levee Inspection Report By Mile - Spring 2020

# **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	04/07/2020 04/07/2020	Zach Jojola

							_
LM Start	0.03	Rating **	М	Issue No.		1	
LM End	0.59	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.6025	89 °	38.599955	0
пеш				-121.5560	70°	-121.565733	0
DWR ID	DWR_ST0	008_02_s _ 202	0_1				
		Comn	nent Cod	de			
V1 : Control annual grass and weeds on the levee slopes and easements.							
Inspector Comment							



View of vegetation on the landside slope. Spring 2020.

LM Start	0.38	Rating **	М	Issue No.		9
LM End	0.38	Issue Type +	En	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	P Field Study		38.60098	35 °	38.600985 °
item				-121.5622°	16 °	-121.562216 °
DWR ID	25124					
Comment Code						

# Inspector Comment

DS\_ID:25124 FS\_ID:56664 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 3/26/2020 Record is Non-Urgent. No evidence of pipe found. Per Permit No. 7689, pipe was properly removed in 1972.

Record is inactive. (S. Donovan - DWR UCIP)

FIELD\_STRUCT\_DESC: \*REMOVED\* 18-inch dredge pipe of unknown material through the levee crown at 2 feet depth. (18-inch dredge pipe [HLM 0.38] authorized under Permit No. 7689, 1971 - Shellmaker, Inc.). FS Date: 3/26/2020 1:31:00 PM

#### Photo 1 of 3: UCIP\_SP\_2020\_56664\_83748.jpg



Overview of the levee crown at assumed location of crossing looking d/s.

## **Levee Inspection Report By Mile - Spring 2020**

# **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	04/07/2020 04/07/2020	Zach Jojola

LM Start	0.38	Rating **	М	Issue No.		9 (cont)
LM End	0.38	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	P Field Study		38.6009	85 °	38.600985
item			-121.5622	16 °	-121.562216	
DWR ID	25124					



LS view: Overview of the levee slope at assumed location of crossing.

LM Start	0.38	Rating **	М	Issue No.	9 (cont)
LM End	0.38	Issue Type +	En	Location *	



WS view: Overview of the levee slope at assumed location of crossing.

LM Start	1.15	Rating **	М	Issue No.		2	
LM End	1.58	Issue Type +	Ма	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Vegetatio	n	38.5977	07°	38.595749	0	
item	item			-121.575704 °		-121.583253	٥
DWR ID	DWR_ST0	008_02_s _ 202	0_2				
		Comn	nent Cod	de			
	V1 : Control annual grass and weeds on the levee slopes and easements.						
	Inspector Comment						

No Photos

## Levee Inspection Report By Mile - Spring 2020

## **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.16	Rating **	М	Issue No.	10	
LM End	1.16	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC	P Field Study	,	38.5976	70 °	38.597670 °
item			-121.5759	70 °	-121.575970 °	
DWR ID 815						
Comment Code						

# Inspector Comment

DS\_ID:815 FS\_ID:56668 EP\_NO: 7616

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 03/26/2020 Record upgraded to Non-Urgent due to conflicting location information. Recommend contacting owner for clarification. No evidence of pipe found during inspection. (S. Donovan - DWR UCIP)

FIELD\_STRUCT\_DESC: 1.5-inch conduit (telephone) through the levee, 2 feet below the levee crown. (Telephone conduit [HLM 1.19] authorized under Permit No. 7616, 1971 - Pacific Telephone and Telegraph Company (PT&T). Renewal of Permit No. 7616 authorized under Permit No. 7616-A, 1973 - PT&T). [Additional Reference: DWR

Levee Log, 2004 (HLM 1.17)]. FS Date: 3/26/2020 2:27:00 PM



Overview of the levee crown at assumed location of crossing looking d/s.

LM Start	1.18	Rating **	М	Issue No.		11		
LM End	1.18	Issue Type +	En	Location *				
Category	Supplemental					GPS Latitude/Longitude		
Calegory			Start		End			
Item	DWR UC		38.5976	20 °	38.597620 °			
пеш				-121.5762	80 °	-121.576280 °		
DWR ID	816							

# Comment Code Inspector Comment

DS\_ID:816 FS\_ID:56659 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 03/26/2020 Record upgraded to Non-Urgent. Geophysical study (07-20-2018) found no evidence of the pipe. (S.

Donovan - DWR UCIP)

FIELD\_STRUCT\_DESC: 30-inch concrete culvert through the levee, 23.5 feet below the crown. A 24-inch pipe is sleeved through the 30-inch culvert with the annular space concrete grouted. A screw gate is in the concrete well on the waterward (WS) shoulder. [Additional

Reference: DWR Levee Log, 2004 (HLM 1.18)].

FS Date: 3/26/2020 2:33:00 PM



Overview of the levee crown at assumed location of crossing looking d/s.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2020

## **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.19	Rating **	М	Issue No.	12	
LM End	1.19	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory		Start End				
ltom	DWR UC	IP Field Study		38.5975	75 °	38.597575 °
пеш	Item				06°	-121.576506 °
DWR ID 19071						
Comment Code						

## Inspector Comment

DS\_ID:19071 FS\_ID:56660 EP\_NO: 14082

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 03/26/2020 Record remains No Action Needed. Unable to verify presence of flap gate because discharge end submerged. Otherwise, no issues observed during inspection. (S. Donovan - DWR UCIP)10/04/2012 Vertical GI pipe trash rack in inlet structure. Big pumping plant with 5 pipes. (P. Amatya - DWR UCIP) FIELD\_STRUCT\_DESC: [Reclamation District No. 537 Drainage Pump Station] 1 of 3: 42-inch coated steel drainage pipe through the levee, 2.8 feet below the crown. Pumping plant located 20 feet off the landside (LS) toe. Air release valve on the LS shoulder. Flap gate on the discharge end of the pipeline. Cutoff wall around pipes at levee center line. Walkway on the LS of the levee. Transformer on fill on the LS, 50 feet downstream of pump station, with underground electrical extension to pump station. (42-inch pipe [HLM 1.19 - HLM 1.23] authorized under Permit No. 14082, 1985 - Kaiser Development Company). FS Date: 3/26/2020 3:11:00 PM

LM Start	1.19	Rating **	М	Issue No.	12 (cont)
LM End	1.19	Issue Type +	En	Location *	



Overview of the levee crown looking d/s.

Photo 2 of 3: UCIP\_SP\_2020\_56660\_83759.jpg



WS view: Overview of the levee slope and siphon breaker.

## Levee Inspection Report By Mile - Spring 2020

## **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.19	Rating **	М	Issue No.		12 (cont)	
LM End	1.19	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.59757	75 °	38.597575 °	
item				-121.57650	06°	-121.576506 °	
DWR ID	19071					·	



WS view: Looking down the levee slope.

LM Start	1.20	Rating **	М	Issue No.	13		
LM End	1.20	Issue Type +	En	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory	Category					End	
Item	DWR UC	P Field Study		38.597544°		38.597544 °	
пеш				-121.5766	21 °	-121.576621 °	
DWR ID 817							
Comment Code							

#### Inspector Comment

DS\_ID:817 FS\_ID:56625 EP\_NO: 11826

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 03/26/2020 Record upgraded to Non-Urgent due to missing flap gate. Otherwise, no issues observed during inspection. (S. Donovan - DWR UCIP)10/04/2012 Vertical GI pipe trash rack in inlet structure; trash rack has fallen apart and found in the water. Fallen gate shows no hazard to flood protection. (P. Amatya - DWR UCIP) FIELD\_STRUCT\_DESC: 36-inch coated steel discharge pipe through the levee, 2 feet below the crown. Steel pipe pump structure and pump house on the landside (LS) with a vertical pump. Siphon breaker on the apex of the pipe near the LS of the levee. Flap gate on the discharge end of the pipe. Cutoff wall around pipe at levee center line. (36-inch pipe [HLM 1.2] authorized under Permit No. 11826, 1976 - Reclamation District No. 537). [Additional Reference: DWR Levee Log, 2004 (HLM 1.20)].

FS Date: 3/26/2020 8:44:00 AM

#### Photo 1 of 3: UCIP\_SP\_2020\_56625\_83790.jpg



Overview of the levee crown looking d/s.

## **Levee Inspection Report By Mile - Spring 2020**

# **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.20	Rating **	М	Issue No.		13 (cont)	
LM End	1.20	Issue Type +	En	Location *			
Category	Suppleme	GPS La	atitud	le/Longitude			
Calegory				Start		End	
Item	DWR UC	P Field Study		38.5975	44 °	38.597544	0
пеш				-121.5766	21 °	-121.576621	0
DWR ID	817						



WS view: Looking down the levee slope.

LM Start	1.20	Rating **	М	Issue No.	13 (cont)
LM End	1.20	Issue Type +	En	Location *	



WS view: Partially submerged pipe outlet with missing flap gate and overview of the levee slope.

## Levee Inspection Report By Mile - Spring 2020

## **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.20	М	Issue No.		14	
LM End	1.20	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC	P Field Study		38.5975	31 °	38.597531 °
item				-121.5766	76 °	-121.576676 °
DWR ID 818						
Comment Code						

## Inspector Comment

DS\_ID:818 FS\_ID:56626 EP\_NO: 2930

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 03/26/2020 Record upgraded to Non-Urgent due to the flap gate not fully closing. Need to investigate the actual depth of crossing due to conflicting information in the record sources. Crossing appears to be installed at an elevation higher than 23.5 feet below the crown. (S. Donovan - DWR UCIP)10/04/2012 Vertical GI pipe trash rack in inlet structure. Big pumping plant with 5 pipes. (P. Amatya - DWR UCIP)

FIELD\_STRUCT\_DESC: [Reclamation District No. 811 Drainage Pumping Plant] 42-inch drainage pipe through the levee, 23.5 feet below the crown. Pumping plant on a pipe structure in the drainage ditch on the landside (LS). Metal stairway on the LS slope to the pumping plant. Siphon breaker in an 18-inch corrugated metal pipe (CMP) riser on the LS slope. Flap gate on the waterside (WS) end. Cutoff wall around pipe at levee center line. (42-inch steel pipe [HLM 1.20] and pumping plant authorized under Permit No. 2930, 1958 - Reclamation District No. 811. Stairway to pumping plant authorized under Permit No. 3056, 1959 - Reclamation District No. 811). [Additional Reference: DWR Levee Log, 2004 (HLM 1.21)]. FS Date: 3/26/2020 12:39:00 PM

LM Start	1.20	Rating **	М	Issue No.	14 (cont)
LM End	1.20	Issue Type +	En	Location *	



Overview of the levee crown looking d/s.

#### Photo 2 of 3: UCIP\_SP\_2020\_56626\_83803.jpg



WS view: Looking down the levee slope.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy Ob: Design & System Obsolescence
D: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Spring 2020

# **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.20	Rating **	М	Issue No.		14 (cont)		
LM End	1.20	Issue Type +	En	Location *				
Category	Supplemental					GPS Latitude/Longitude		
Calegory				Start		End		
Item	DWR UC	P Field Study		38.5975	31 °	38.597531	0	
item				-121.5766	76 °	-121.576676	0	
DWR ID	818							



WS view: Partially submerged pipe outlet with flap gate not fully closing.

LM Start	1.27	Rating **	М	Issue No.	15		
LM End	1.27	Issue Type +	En	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UC	P Field Study		38.59718	1 °	38.597181 °	
item				-121.57784	0 °	-121.577840 °	
DWR ID 19070							
Comment Code							

# Inspector Comment

DS\_ID:19070 FS\_ID:56638 EP\_NO: 17497

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 03/26/2020 Record upgraded to Non-Urgent due to missing maintenance and performance records. No issues observed during inspection. (S. Donovan - DWR UCIP)10/04/2012 Petroleum pipline markers found on LS and WS of the levee. (P. Amatya - DWR UCIP)

FIELD\_STRUCT\_DESC: 12-inch steel jet fuel pipeline bored under the Sacramento River, Sacramento Bypass, and their levees, at an unknown depth. Markers found on the landside (LS) of the levee. (12-inch pipeline authorized under Permit No. 17497, 2003 - Wickland Pipelines LLC). (Realignment of portion of pipeline due to the Lower Elkhorn Basin Levee Setback Project is authorized under Permit No. 17497-1, 2019 - Wickland Pipelines LLC).

FS Date: 3/26/2020

#### Photo 1 of 3: UCIP\_SP\_2020\_56638\_83814.jpg



Overview of the levee crown looking d/s.

## **Levee Inspection Report By Mile - Spring 2020**

# **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.27	Rating **	М	Issue No.		15 (cont)	
LM End	1.27	Issue Type +	En	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory			Start		End		
Item	DWR UC	P Field Study		38.5971	81 °	38.597181	0
item				-121.5778	40 °	-121.577840	0
DWR ID	19070						



WS view: Overview of the levee slope with petroleum pipeline marker.

LM Start	1.27	Rating **	М	Issue No.	15 (cont)
LM End	1.27	Issue Type +	En	Location *	



WS view: Overview of the levee slope with petroleum pipeline marker.

## Levee Inspection Report By Mile - Spring 2020

## Sacramento Maintenance Yard Sacramento Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.27	Rating **	М	Issue No.	16	
LM End	1.27	Issue Type +	En	Location *		
Category Supplemental			GPS Latitude/Longitude			
			Start		End	
Itom	DWR UCIP Field Study			38.5971	80°	38.597180 °
item	Item				50°	-121.577850 °
DWR ID	R ID 19078					
Comment Code						

# Inspector Comment

DS\_ID:19078 FS\_ID:56633 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 03/26/2020 Record is Non-Urgent. No evidence of pipe found during inspection. Geophysical study for nearby DSID 19077 (07-20-2018) found no evidence of a crossing at the site. No As-Built

drawing found. (S. Donovan - DWR UCIP)

FIELD\_STRUCT\_DESC: [Reclamation District No. 537 Drainage Pumping Plant] 2 of 2: 30-inch drainage pipe of an unknown material through the levee, at an unknown depth. Screw gate in a concrete well on the waterside (WS). Pumping plant on the landside (LS). [Additional Reference: USACE Sacramento O&M Manual, Unit 116, August 1955,

listed as 30-inch drainage pipe]. FS Date: 3/26/2020 2:50:00 PM



Overview of the levee crown at assumed crossing location looking d/s.

LM Start	1.27	Rating **	М	Issue No.		17	
LM End	1.27	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Category			Start		End		
DWR UCIP Field Study				38.5971	80 °	38.597180 °	
item		-121.5778	50 °	-121.577850 °			
DWR ID	19077						

# Comment Code

## Inspector Comment

DS\_ID:19077 FS\_ID:56631 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 03/26/2020 Record upgraded to Non-Urgent. Geophysical study (07-20-2018) found no evidence of the pipe. No As-Built drawing found. (S. Donovan - DWR UCIP)

FIELD\_STRUCT\_DESC: [Reclamation District No. 537 Drainage Pumping Plant] 1 of 2: 30-inch drainage pipe of an unknown material through the levee, at an unknown depth. Screw gate in a concrete well on the waterside (WS). Pumping plant on the landside (LS). [Additional Reference: USACE Sacramento O&M Manual, Unit 116, August 1955,

listed as 30-inch drainage pipe]. FS Date: 3/26/2020 2:47:00 PM

Photo 1 of 1 : UCIP_	SP_2020_5663	1_83824.jpg
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Overview of the levee crown at assumed crossing location looking d/s.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## **Levee Inspection Report By Mile - Spring 2020**

# **Sacramento Maintenance Yard Sacramento Bypass**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sacramento Bypass or South Levee	Left	1.79	04/07/2020 04/07/2020	Zach Jojola

LM Start	1.31	Rating **	М	Issue No.		3	
LM End	1.51	Issue Type +	Ma	Location *	WS		
Earthen Levee			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	Vegetation			38.5969	64 °	38.596081 °	
item			-121.578600 °		-121.582020 °		
DWR ID DWR_ST0008_02_s _ 2020_3							
	Comment Code						
V1 : Control annual grass and weeds on the levee slopes and easements.							
Inspector Comment							

No Photos

LM Start	1.77	Rating **	A/W	Issue No.		8	
LM End	1.77	Issue Type +	Ма	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Erosion / Bank Caving			38.5947	10°	38.594710°		
пеш					82 °	-121.586582 °	
DWR ID DWR_ST0008_02_s _ 2019_8							
	Comment Code						
E1: Note a	E1 : Note and monitor erosion site.						
Inspector Comment							
This is a runoff location, but it is not within the levee prism. Recommend monitoring.							



View of erosion on waterside levee slope. Spring 2017.